

Application Serial No. 10/504,824
Amendment Dated July 26, 2006
Reply to Office Action Dated February 27, 2006

Remarks

Claims 1-11 are pending, claims 12-18 are withdrawn.

Claims 1-11 stand rejected.

Claim 1 has been amended.

Claims 19 and 20 have been added.

Claims 1-11 and 19-20 are submitted herein for further review on the merits.

No new matter has been added.

In the Office Action, the Examiner has rejected claim 1 under 35 U.S.C. § 102(b) as being anticipated by Gotti (U.S. Patent No. 6,131,706) and claims 2-11 under 35 U.S.C. § 103(a) as being unpatentable over Gotti in view of Emmons (U.S. Patent No. 5,181,588).

Applicants respectfully disagree with the Examiner's contentions and submit the following remarks in response.

The present invention as claimed in independent claim 1 is directed to a floating caliper disk brake having a support bracket and a caliper body supported by the support bracket in such a manner that it can slide along an axis transverse to a disk plane. The support bracket has a securing means for securing the support bracket to the suspension of a vehicle and support means suitable for slidably supporting the caliper body.

The support bracket includes an inner wall facing the inside of the vehicle and an outer wall opposite the inner wall and spaced therefrom. The inner wall and the outer wall are fixedly joined and arranged one on each side of a disk plane which constitutes the plane in which the

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brake disk lies, delimiting a space for accommodating a portion of a brake disk.

The inner wall forms two pad seats and the outer wall forms two pad seats, each pad seat of the four pad seats is suitable for accommodating a pad and each pad seat of the four pad seats has two stop surfaces, which are substantially opposite one another, for stopping the pad in two opposite directions.

In prior art arrangements basic brakes for high performance heavy vehicles proved inadequate thus leading to larger dimensioned brakes. However, the larger dimensions increase the costs of production and lead to both excessive stresses and deformation, as well as non-uniform wear on the pads. (See page 1 and 2 of the specification)

The arrangement of the present invention as claimed in claim 1, as described on page 5, line 11 through page 6 line 9, provides an increase in total friction surface by means of the use of four pads and the use of brake disks of larger diameter. This brake also enables the dimensions of the individual pads to be limited and the braking force to be distributed in such a manner as to ensure optimum braking performance and uniform wear of the pads. (See page 13 of the specification)

The cited prior art, namely Gotti teaches a disk brake for addressing the problem of heat dissipation by providing a floating caliper body arrangement. In Gotti each of the walls defines only a single pad seat. (See Figure 2 and the accompanying description)

However, Gotti does not teach or suggest all of the elements of the present invention as claimed. For example, there is no teaching or suggestion in Gotti that discloses the inner wall forming two pad seats and the outer wall forming two pad seats, each pad seat of the four pad seats being suitable for accommodating a pad and each pad seat of the four pad seats having two

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stop surfaces, which are substantially opposite one another, for stopping the pad in two opposite directions.

Applicants note that the Examiner has not cited the Emmons reference against independent claim 1. Applicants note for the record that Emmons does not teach or suggest the elements of claim 1 either. Emmons is directed to disk brake that has an improved retraction of the pads achieved by the structure and casting of the caliper. In Emmons a caliper body is provided with three yokes, while the support bracket or anchor plate 27 defines a single pad seat on each side of the brake disk.

However, Even if the Examiner were to cite to attempt to combine Emmons with the already cited Gotti reference, the resulting structure would still not teach or suggest the inner wall forming two pad seats and the outer wall forming two pad seats, each pad seat of the four pad seats being suitable for accommodating a pad and each pad seat of the four pad seats having two stop surfaces, which are substantially opposite one another, for stopping the pad in two opposite directions.

Applicants have added new claims 19 and 20.

New dependent 19 claim further claims the feature that the inner wall and outer wall of the support bracket are connected to one another by two substantially U-shaped lateral yokes and a substantially U-shaped central yoke arranged between the lateral yokes. Such an arrangement is described on page 4, lines 12-17 of the specification and in the accompanying drawings.

New dependent 20 claim further claims the feature that the two opposite stop surfaces of each pad seat of the four pad seats are formed respectively by a wing of the central yoke and a wing of one of the lateral yokes of the same wall of the support bracket. Such an arrangement is described on page 5, line 11 through page 6, line 9 of the specification and in the accompanying

Application Serial No. 10/504,824
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drawings.

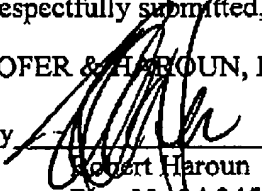
As such, Applicants respectfully request that the rejection of independent claim 1 be withdrawn. As claims 2-11 and new claims 19 and 20 depend therefrom the rejection of claims 2-11 should be withdrawn and not carried over to new claims 19 and 20.

In view of the foregoing, Applicants submit that pending claims 1-11 and 19-20 are in condition for allowance, the earliest possible notice of which is earnestly solicited. If the Examiner feels that an interview would facilitate the prosecution of this Application he is invited to contact the undersigned at the number listed below.

Respectfully submitted,

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